Journal of Applied Linguistics Studies, Vol.3, No.2, 2024: 181-196
https://jals.aliabad.iau.ir
ISSN: 2820-9974

The Myth of L-L2 Metacognitive Reading Strategy Transfer: Actual and Perceived Strategy Use in Focus

Somayeh Nilforoushan[1], Mojgan Rashtchi*[2], Gholam-Reza Abbasian[3]

[1] Department of English Language, Science and Research Branch, Islamic Azad University, Tehran, Iran.
[2]Department of English Language, North Tehran Branch, Islamic Azad University, Tehran, Iran
[3] Department of English Language, Imam Ali University, Tehran, Iran.

Email: Somayeh.nilforoushan@gmail.com
Email: gabbasian@yahoo.com

*Corresponding Author`s Email: mojgan.rashtchi@gmail.com

Received: 06-02-2024, Accepted: 02-06-2024

ABSTRACT

This study employed a mixed methods approach to investigate Iranian EFL learners' perceived and actual use of metacognitive reading strategies while reading English and Persian. The study examined the actual and perceived MRs across three categories: global, problem-solving, and support. In the quantitative phase, 133 intermediate EFL learners studying TEFL at Islamic Azad University and Farhangyan University were selected as participants. In the qualitative phase, 40 students from high and poor reading ability levels (20 from each group) were selected as the focus group participants. The instruments employed in this study included the Persian Reading Comprehension Placement Test, the Oxford Placement Test, the Reading Section of the PET, Perceived Reading Strategy Questionnaires in English and Persian, semi-structured interviews, and think-aloud protocols. The data analysis involved using chi-square, MANOVA, and theme-based analysis. The findings indicated a statistically significant difference between the frequency and type of perceived problem-solving strategies but no statistically significant disparity between the frequency or type of support and global strategies. The qualitative data revealed a discrepancy between the participants' actual usage in practice and their subjective perception particularly in relation to the global and support strategies. Finally, the theoretical and pedagogical implications of this study were highlighted.

KEYWORDS: Actual Use; Metacognitive Reading Strategies (MRS); Perceived Use; Reading Comprehension

INTRODUCTION

Undeniably, the fundamental role of reading skills has been recurrently emphasized in the plethora of research on the realm of second language acquisition. Its significance lies in its everyday use in different aspects of personal, professional, and academic life (Loppies & Lekatompessy, 2021). To understand texts, readers integrate different types of information from them and combine them with their prior knowledge (Perfetti & Stafura, 2014). Therefore, the process of reading is intricate and multifaceted. Numerous factors interfere with understanding, such as background knowledge, personal factors, task demands, reading speed, reading context influence, and strategic processes (Abubakar, 2020; Rouet et al., 2017).

Knowledge of Metacognitive Reading Strategies (MRSs) has a critical role in reading comprehension and the educational process and warrants reading comprehension success and higher test scores (Hong-Nam & Page, 2014; Mytcowicz et al., 2014; Zhang & Seepho, 2013). MRSs, premeditated strategies employed by learners to

monitor their understanding of the text, play a crucial role in reading comprehension and are necessary for mastering reading skills and overcoming comprehension problems (Feller et al.,2020; Mokhtari & Reichard, 2002).This line of research has focused on looking into language learners' perceived use of metacognitive reading strategies in which learners` preferred MRs are evaluated via a questionnaire in a variety of global contexts (Malcolm, 2009; Sheorey & Mokhtari, 2001). Also, using qualitative designs, numerous studies have examined the real (actual) use of MRs that learners bring into the real reading situation (Ahmadian & Pasand, 2017; Al Khaleefah, 2023; Al-Nujaidi, 2003; Al-Qahtani, 2020; Al Rasheed, 2014).

The findings of previous studies indicate that a significant proportion of university students in Iran lack the necessary proficiency in comprehending academic reading (Abedi, 2017; Jamalipour & Khomeijani Farahani, 2015). Moreover, it has been observed that Iranian EFL learners exhibit poor performance in the reading component of standardized tests (Taghizadeh & Khalili, 2019). Other factors accounting for their failure include insufficient proficiency in the target language and poor vocabulary knowledge (Sidek & Rahim, 2015), inadequate comprehension of text types and schemata (Al Asmari & Javid, 2018), and ineffective MRSs (Al-Mekhlafi, 2018). Accordingly, as Alsheikh and Mokhtari (2011) claim, research on MRSs provides a comprehensive understanding of the characteristics of interpretive reading.

Several studies support the link between the claim that L1 strategies transfer to L2 reading (e.g., Lin &Yu, 2015). The transfer of MRSs has triggered numerous quantitative and qualitative research attempts, leading to exciting results. The process can be from L1 to L2 and vice versa. Busby (2018) showed a remarkably close awareness of RSs in L1 and L2. Comparing L1 and L2 RSs used by EFL learners, Lin and Yu (2015) demonstrated that they preferred using a reading strategy in a similar pattern. Specifically, the use of MRSs was identical across languages. However, Tang and Tian (2015) concluded that although the use of strategies features a similar pattern in Chinese and English, any transfer of strategies between L1 and L2 is characterized by a degree of uncertainty.

Disagreement still exists on the degree of transfer, the strategies that can be transferred, the role of L2 proficiency in the transfer, and the difference in the type of strategies learners prefer to retrieve from their L1 are still issues that need exploration. Besides, none of the studies have focused on controlling the reading ability in L1. Although native speakers are proficient in their L1, they may be heterogeneous in their ability to read and comprehend. Therefore, more research is necessary to explore strategies employed in L1 and L2 reading across different languages, considering the L1 reading comprehension ability level. Accordingly, to concentrate on such a gap in pedagogy and to eradicate some ESL/EFL readers' problems, the current research attempted to evaluate the perceived and actual use of reading strategies of intermediate-level participants in the EFL context of Iran across the variable of the first language.

REVIEW OF THE RELATED LITERATURE

READING COMPREHENSION

To understand text, readers obtain different types of information from it and combine it with their prior knowledge (Perfetti & Stafura, 2014). Therefore, the process of reading is intricate and multifaceted. Numerous factors interfere with understanding, such as background knowledge, personal factors, strategic processes, task demands, reading speed, and reading context influence (Abubakar, 2020; Rouet et al., 2017). Kintsch (1988) argues that comprehension entails the involvement of two distinct processes, namely, construction and integration, and proposes a discourse comprehension model called the Construction-Integration Model. Within the model's framework, comprehension mostly depends on knowledge of the text rather than previous knowledge. As Xiao (2016) explains, in the model construction phase, idea units or propositions are formed through the use of words, sentences, or context. Then, whether the knowledge unit is related to the propositions will be activated. Units of knowledge are improved by continuously adding inferences and propositions, expressing local meaning, and being organized into microstructures, while higher-level relationships are created in the macrostructure. Once the units of knowledge have been built, the integration phase takes place. Integration is a regulatory process in which contextual networks take place at the levels of meaning, grammar, and discourse. This merging occurs in a repetitive cycle.

Journal of Applied Linguistics Studies, Vol.3, No.2, 2024: 181-196
https://jals.aliabad.iau.ir
ISSN: 2820-9974

Shahnazari and Dabaghi (2014) argue that similar processes in the Construction Integration model for L1 RC clarify L2 reading comprehension. Like L1 understanding perception, L2 reading cognizance starts with perceiving words, recovering semantic data, and appointing syntactic roles. Unlike L1 RC, this developing procedure does not happen at a planned recognition level for L2 reading. L2 readers may not perceive a few words in the first spot. They will be unable to recover semantic data of the perceived words (Xiao, 2016). This event happens because of the absence of linguistic information and the wasteful handling of such information. L2 readers usually experience rules comparable to the ones they do when reading in their L1. These forms incorporate initiating foundation information, coordinating it with propositions in text, separating some control units, and finally, shaping a circumstance model as the last item once they fabricate a sensibly decent text. The Construction Integration model terms the result of these procedures as the circumstance model.

Similarly, L2 readers use other information and subjective assets accessible in their L1 to assemble the ideal circumstance model. For instance, L2 readers may recognize disjointedness in the propositions of L2 text. They may address the issue by falling back on foundation information or making inductions related to background knowledge. All these procedures are regular subjective exercises during L1 reading. Therefore, the capacity to manufacture a circumstance model can be an element of L1 understanding ability (Shahnazari & Dabaghi, 2014). Xiao (2016), referring to Cummins's Linguistic Threshold level (1979), discusses the role of restricted limits of working memory in understanding the position of L1 ability in L2 reading. The hypothesis states that for the L1 reading ability to be shown in L2 RC, L2 readers must attain a restricted degree of L2 proficiency. The threshold level can be characterized as a nature of the text that is adequate to afford L2 readers cognitive assets for enhancing their background information, separating some control units, managing perception breakdowns, and figuring out how to assemble a fruitful circumstance model at the final step. If an individual does not possess this capacity to make a circumstance model effective in L2 reading, the language limit impact is required to vanish, and the job of L1 reading fitness becomes noticeable in L2 RC.

On the other hand, if it is too hard for L2 readers to outfit their assets to assemble a decent circumstance model because of the absence of enough linguistic knowledge in L2 or potentially wasteful preparation of such information, the language threshold impact may command. Since the nature of the textbase will decide the degree of comprehension proposed to be an element of L2 ability, it is L2 ability that turns into the most significant indicator of L2 RC at this degree of L2 ability (Xiao, 2016).

A few studies (Walter, 2004, 2007) have demonstrated that structure-building capacity is transferable from L1 to L2. This transfer gives off an impression of being connected to improving working memory in L2 (giving a potential clarification of the precise limit nature of the transfer). If the process of constructing effective structures is employed in the L1 but not in the L2, what is lacking is not the ability to construct mental structures but rather the attainment of a certain level of proficiency in L2, which is a prerequisite for successfully implementing the structure-building skill. The ability to build dependable mental portrayal because of L2 would possibly improve when the basic limit had been created to a point where a significantly massive number of oblivious choices engaged with building a portrayal were sufficient. This type of building would represent the limited nature of the L1 to L2 transfer.

METACOGNITIVE READING STRATEGIES

Sheorey and Mokhtari (2001) introduced metacognitive, cognitive, and supportive strategies. MRs are part of the Global reading strategy, and the cognitive reading strategy is equivalent to the problem-solving strategy. Each type is clarified as follows:

1. Global Reading Strategies (GLOB) refers to the intentional and meticulous strategies employed by learners to manage and navigate their reading process. Examples are establishing a specific objective, previewing the content's length and organization, and using typographical aids, tables, and figures. These strategies are typically employed during the pre-reading phase.

2. Problem-Solving Reading Strategies (PROB) refer to the activities and approaches learners employ when they encounter difficulties interpreting texts. These strategies may include reading at a slower pace and engaging in the process of inferring the meaning of unfamiliar or ambiguous language.

3. Support Reading Strategies (SUP) are indispensable aids designed to facilitate the reader`s comprehension of the text, such as dictionaries, note-taking, and highlighting information.

Sheorey and Mokhtari (2001) developed the Survey of RSs Questionnaire (SORS) to explain how often students use different RSs. Knowledge of metacognitive RSs has a critical role in RC and the educational process (Mytcowicz et al., 2014). Knowledge and use of metacognitive RSs warrant RC success and higher test scores (Hong-Nam & Page, 2014; Zhang & Seepho, 2013). Several researchers used scales to assess awareness of metacognitive RSs among learners. Mokhtari and Sheorey (2002) introduced a reading appraisal device to raise the consciousness of RSs and improve learners' reading abilities.

TRANSFER OF L1 STRATEGIES

According to Chamot (2005), learning strategies are transferrable. The process can be from L1 to L2 and vice versa. Busby (2018) showed a remarkably close awareness of RSs in L1 and L2. Comparing L1 and L2 RSs used by EFL learners, Lin and Yu (2015) demonstrated they prefer reading strategy use in a similar pattern. Specifically, the use of metacognitive strategy was identical across languages. However, Tang and Tian (2015) concluded that although the use of strategies features a similar pattern in Chinese and English, any transfer of strategies between L1 and L2 is characterized by a degree of uncertainty. A large body of research indicated that highly skilled English learners and L1 readers showed a higher degree of metacognitive awareness and stronger command of strategies (Hong-Nam & Page, 2014; Mytcowicz et al., 2014; Sheikh, Soomro, & Hussain, 2019). Based on the findings of Al-Mekhlafi (2018), there are no significant differences in the strategies employed by university students with varying proficiency levels. Bemani Naeini and Rezaei (2015) discovered a strong association between learners' reading proficiency scores and the strategies they employed throughout the comprehension exam. Additionally, they showed a significant difference in the questionnaire scores between the more and less successful readers, suggesting that the former employed more strategies than the latter.

The studies focusing on L1-L2 transfer of reading ability and use of strategy rely on two main conclusions. Two main conclusions have to be drawn based on the studies focusing on L1-L2 transfer of reading ability and strategy use. First, they all perceive that L1 reading strategies (RSs) carry over to some degree in L2 reading; second, the majority of these studies recognize that L2 proficiency plays a dynamic role in the transfer of strategies from L1 to L2; however, the studies are different in the sense that the degree of strategy transfer differs among them. In other words, while some studies found a considerable degree of transfer of strategies in all types (e.g., Sparks et al., 2009), some found only a few transferable strategies (e.g., Talebi, 2014). The next distinction relates to the kind of individuals involved in the transfer of L1 strategies. A few studies confirmed that participants could apply a variety of L1 strategies in L2 reading when their L2 proficiency level was at the threshold level (e.g., Guo, 2018; Kong, 2006), while others viewed metacognitive strategy as transferable for all participants paying little heed to their L2 proficiency level (e.g., Van Gelderen et al., 2004).

Reviewing the related literature shows that no study has investigated Iranian EFL learners' perceived and actual use of RSs at the intermediate level of English proficiency. Accordingly, to fill such a gap in the literature and to eradicate some ESL/EFL readers' problems, this research attempted to evaluate the perceived and actual use of MRSs of Iranian EFL learners at the intermediate level of English proficiency across L1 (Persian) and L2 (English). Following the purpose of the study, the researchers proposed two research questions:

RQ1: Do perceived metacognitive RSs of Iranian EFL learners differ when they read in English and Persian?
RQ2: How do perceived and actual use of metacognitive RSs of Iranian EFL learners compare when they read in English and Persian?

Journal of Applied Linguistics Studies, Vol.3, No.2, 2024: 181-196
https://jals.aliabad.iau.ir
ISSN: 2820-9974

METHODOLOGY

DESIGN OF THE STUDY

The design of the study is explanatory sequential mixed methods. The qualitative phase followed the quantitative phase, and none of the phases had priority over the other.

PARTICIPANTS

133 Iranian TEFL students from Islamic Azad University (Tehran North Branch and Parand Branch) and Farhangian University participated in the quantitative phase. The students were selected among the 400 students who participated in the reading classes once a week for a four-hour session during the entire semester. At first, students with intermediate English language ability, based on their scores on the Oxford Placement Test, which ranged from 120 to 149, were chosen. Then, the Persian RC Placement Test was run, and one hundred thirty-three students with scores above 5 (mean score in the pilot study) were selected as the main participants. Forty of these were selected at random to serve as the study`s focused participants for the qualitative phase.

INSTRUMENTS
OXFORD PLACEMENT TEST (OPT)

The initial phase of participant selection involved the implementation of the Oxford Placement Test (OPT) (2004) to identify individuals with a moderate degree of proficiency in the English language. The OPT is a typical and standard test for placement purposes; however, due to its low cost and ease of administration, this objectively scored test is widely used in language-related research across the globe. The test consists of two main parts (Listening Test and Grammar Test), each with 100 items. Reading, listening, and vocabulary size are the main areas tested in the first section. The second part assesses readers` comprehension abilities and vocabulary using the context to the greatest extent feasible. A combined score of 200 is obtained from the two test parts.

The test has been adjusted for a variety of significant international language assessment. It can provide instructors and students with useful information for teaching and evaluation. The range score of 120-149 in this test is specified as an intermediate level (Allen, 2004). Therefore, the selection of participants for this study at the intermediate level of the English language was based on their results falling within this range.

PERSIAN READING COMPREHENSION PLACEMENT TEST

The researchers developed a Persian reading comprehension test to divide the students into two groups (low and high) based on their scores below and above the mean. The mean determined in the pilot study was equal to five. Since the researchers intended to select learners with high Persian reading ability, only those with scores above the mean participated in the study. The test had three passages, each containing five multiple-choice items with four alternatives, each carrying one point—the passages comprised recognizing main ideas, vocabulary knowledge, and differencing sections. They were selected from the aptitude tests used as part of Ph.D. entrance examination courses. The following features were considered for test preparation:

a) Length of the texts: The three texts were almost the same length (about 550 to 600 words).

b) Content: A criterion for selecting the passages was “topic familiarity” to control the effects of background knowledge on understanding the text. The passages were about *Fashion, The life of ants, and Piaget’s theory of language learning*. The researchers had prepared a list of 20 topics and consulted ten students almost the same age as the participants to select the most familiar and attractive ones.

c) Difficulty level: There is a lack of standardized reading comprehension exams specifically designed for the Persian language. Therefore, there is no established objective measure for assessing the difficulty level in Persian texts. Thus, the researchers relied on five Persian language professors’ experiences to select appropriate texts. They revised ambiguous items to ensure clarity.

d) Students' interest: during the pilot phase, the level of interest exhibited by students toward the passage was assessed by including a question after the exam, which sought to gather the test takers` perspectives on the themes discussed.

e) Form of the test items: After each text, there were five multiple-choice items presented, each containing four options

f) The Content Validity Ratio (CVR) was calculated (Lawshe, 1975), and all experts agreed on the questionnaire items. To select the Persian reading passages, the researchers tried to choose the reading extracts at the same length as the reading passages. After administering the test to a similar group of a hundred students, item facility and item discrimination indices were computed, and an analysis of choice distribution was conducted. The estimation of the reliability of the test was also conducted using Cronbach`s alpha (r=0.92).

ENGLISH AND PERSIAN PERCEIVED READING STRATEGY QUESTIONNAIRE

This instrument was used to assess perceived RSs in English and Persian. The survey comprised 30 items designed to assess participants` perceived RSs across the three domains: GLOB, PROB, and SUP. The participants` replies were measured using a five-point Likert scale, ranging from 1 (indicating never engaging in the strategy) to 5 (indicating always engaging in the strategy). The researchers used the strategy questionnaire because of its extensive field testing with a wide range of student groups, encompassing native and non-native English speakers. Additionally, the instrument has been proven to possess a reliability value of 0.93, as documented by Mokhtari and Reichard (2002). However, the questionnaire was modified to suit the specific circumstances of the present investigation through a pilot study. The SORS was implemented using a sample of 60 Iranian EFL learners who shared similar characteristics with the study participants. They completed the questionnaire within a 30-minute time frame in the classroom setting. The responses provided by the participants did not exhibit any indications of missing answers to each item. The findings revealed that none of the items were chosen by a significant majority or an exceedingly small minority of the participants. In order to assess the reliability of the questionnaire, the internal consistency of the questionnaire was determined using Cronbach`s alpha. The overall estimated reliability coefficient was 0.88, indicating a high level of reliability. The GLOB, PROB, and SUP subscales had reliability coefficients of 0.79, 0.68, and 0.72, respectively. These coefficients, as stated by Pallant (2020), are considered satisfactory.

The researchers prepared and piloted the Persian version of the English Perceived Reading Strategy Questionnaire to evaluate Iranian EFL learners' perceived RSs in reading Persian texts. First, one of the researchers and an expert translator translated the English version of the questionnaire from English into Persian. Then, inter-rater reliability between the two translators was computed (r=.90) to ensure the translation's suitability. In the next step, five experts in the field of applied linguistics reviewed the translated version of the questionnaire. Out of 30 items of the questionnaire, they agreed on 26 items. The four strategies, "translation, thinking about information in English, using a dictionary, and guessing the meaning of unknown words," were removed because they were irrelevant to reading in Persian.

The same procedure for piloting the English version was conducted for the Persian version. The researchers did not notice any missing answers indicative of the respondents' misunderstandings of the items. Then, they examined the range of the responses elicited by each item, and the results showed item variations in the answers. Cronbach's alpha coefficient was employed to assess the instruments' internal consistency and to investigate the extent to which each item within the multi-item scale correlated with other items in the subscales and the overall test result. The overall reliability estimate was found to be 86.6%. Additionally, the GLOB, PROB, and SUP subscales demonstrated reliabilities of 0.70, 0.68, and 0.76, respectively.

THINK-ALOUD PROTOCOL

The participants sat for the think-aloud task while reading the English and Persian reading comprehension materials. The study investigated the use of think-aloud protocols to analyze the strategies employed by students during the reading process. The pilot study involved the implementation of the think-aloud protocol with a group of

five students who shared characteristics comparable to those of the intended participants. The pilot study aimed to identify and address any practical challenges that may arise while administering think-aloud protocols. Subsequent interviews were performed/run to supplement the think-aloud protocols with each participant. The participants articulated their perspectives regarding the passage, including their assessment of its level of complexity and the reasons behind their perception of its ease or difficulty. The interviews were recorded in audio format. The optimal duration for the think-aloud procedure was determined to be fifteen seconds.

PROCEDURE

The present study was performed in three distinct phases: a pilot study, a quantitative phase, and a qualitative phase. All the instruments needed for the study were prepared and piloted in the pilot phase. The quantitative phase of the study involved a sample of 400 Iranian EFL learners who were enrolled in the TEFL program at Islamic Azad University (specifically the North Tehran and Parand Branches) as well as Farhangian University. At this juncture, they had the courses in reading 1, II, or III. This phase was conducted across ten classrooms, with an approximate class size of 40 students per class, throughout four sessions. Prior to commencing the research, in accordance with ethical principles in research (Cohen et al., 2017), the researchers duly apprised the participants of the study`s objectives to safeguard their rights from any potential violations.

During the initial session, the students underwent the Persian RC Placement Test. The administration of the Oxford Placement Test took place during the second session. During the administration of these proficiency tests, participants were prohibited from seeking clarification on the topic or using a dictionary. Subsequently, the English and Persian Perceived Questionnaires were administered. A thorough examination of each submitted questionnaire was conducted by one of the researchers to ascertain that all questions had been answered by the participants, hence mitigating the need to discard any questionnaire and maintain the integrity of the data.

Forty students were randomly selected as the focused-group participants for the qualitative phase. Therefore, before collecting data in this phase, the researchers obtained the participants' informed consent before the qualitative phase. They explained the study's purpose and encouraged them to participate. Also, to compensate for the time they allocated for this study, five free teaching RS sessions were held for these participants at the end of the study.

The researchers used think-aloud protocols to ascertain the participants' RSs when engaging with English and Persian texts. The participants did the think-aloud protocols for four different reading texts (two in English and two in Persian). Prior to engaging in the think-aloud tasks, the participants underwent a training session to understand the concept and practice of thinking aloud. During the think-aloud tasks, in instances where a student`s pause exceeded a duration of 15 seconds (as previously confirmed through piloting to be an adequate timeframe), one of the researchers, who was present during the session, would inquire about the student`s thought process. The students were provided with enough time to read a substantial chunk of text and comprehend its content without being excessively prolonged to prevent diversion from the immediate focus.

RESULTS

Descriptive statistics on the types and number of Iranian EFL learners' perceived RSs were also calculated. Table 1 provides information on the mean, standard deviation of types, and the number of MRs received by Iranian EFL learners.

Journal of Applied Linguistics Studies, Vol.3, No.2, 2024: 181-196
https://jals.aliabad.iau.ir
ISSN: 2820-9974

Table 1

Descriptive Statistics, Types, and Number of Participants' Perceived MRs

	N	Mean	SD
Having Purpose	133	3.63	1.215
Taking Notes	133	2.99	1.346
Using Prior Knowledge	133	3.44	1.281
Previewing Text	133	3.45	1.345
Reading Aloud	133	2.97	1.419
Summarizing	133	2.57	1.361
Checking How Text Content Fits Purpose	133	3.09	1.209
Reading Slowly and Carefully	133	3.84	1.065
Using Reference Materials	133	3.29	1.260
Noting Text Characteristics	133	3.14	1.250
Trying to Stay Focused on Reading	133	4.20	1.011
underline or circle information	133	3.74	1.308
Adjusting Reading Rate	133	3.32	1.251
Determine What to Read	133	2.82	1.254
Finding Relationship among Text Ideas	133	4.11	1.241
Paying Close Attention to Reading	133	4.01	1.111
Using Text Features (e.g., Table Figures)	133	3.46	1.357
Pausing and Thinking about Reading	133	3.65	1.194
Using Context Clues	133	3.85	1.203
paraphrasing	133	3.59	1.320
Visualizing Information	133	3.64	1.287
Using Typological Aids (e.g., italics)	133	3.61	1.254
Analyzing and Evaluating the Text	133	3.20	1.264
Go Back and Forth in the Text	133	3.40	1.296
Checking Understanding	133	3.65	1.088
Predicting or Guessing Text Meaning	133	4.07	.994
Rereading for Better Understanding		4.02	1.104
Asking Oneself Questions to Find in the Text	133	2.89	1.247
Confirming Prediction	133	3.08	1.175
Guessing the Meaning of Unknown Words	132	3.83	1.175
Valid N (Listwise)	132		

Journal of Applied Linguistics Studies, Vol.3, No.2, 2024: 181-196
https://jals.aliabad.iau.ir
ISSN: 2820-9974

The study also analyzed the descriptive statistics of three different forms of perceived Mrs. The results are presented in Table 2. As evident, the mean and standard deviation values for GLOB, PROB, and SUP are found to be (M=2.583, SD=1.272), (M=2.416, SD=1.223), and (M=2.560, SD=1.337), respectively.

Table 2

Descriptive Statistics, Three Types of Perceived MRs

	N	M	SD	Min.	Max.
GLOB	132	2.583	1.272	1.00	5.00
PROB	132	2.416	1.223	1.00	5.00
SUP	132	2.560	1.337	1.00	5.00

As indicated in Table 2, the highest mean score is observed for GLOB (M=2.583, SD=1.272), while the lowest mean score is observed for SUP(M=2.560, SD=1.337).

Following the computation of descriptive statistics, separate one-way chi-square tests were conducted to assess the disparity in perceived MRs among Iranian EFL learners based on the types and frequencies. The outcomes of the chi-square test for GLOB are presented in Table 3.

Table 3

Chi-Square Test, GLOB

	X^2	df	p
GLOB	14.29	2	.00

Table 3 demonstrates a significant distinction in the type and frequency of GLOB (χ^2 = 14.298, df =2, *p>.05). The occurrence of GLOB in terms of frequency and type does not differ in Iranian EFL learners' perceived MRs. Another Chi-square analysis was performed to examine the distinction in frequency and strategy type for PROB, as illustrated in Table 4.

Table 4

Chi-Square, PROB

	X^2	df	p
PROB	16.40	2	.00

According to the data presented in Table 4, a statistically significant difference existed in the frequency and type of PROB (χ^2=16.40, df=2, *p < .05). Furthermore, the chi-square test was computed for the SUP, as demonstrated in Table 5.

Table 5

Chi-Square Test on SUP

	χ^2	df	p
SUP	15.11	2	.62

According to the findings in Table 5, the analysis revealed no statistically significant difference in the frequency and type of SUP (χ^2 = 15.005, df = 2, *p > .05).

The first research question examined the difference between perceived MRs of Iranian EFL learners when they read in English and Persian. Table 6 shows the results of the MANOVA.

Table 6

MANOVA, Tests of Within-Subjects Effects

	F	Hypothesis df	Sig.	Partial Eta Squared (ηp^2)
Intercept	2110.674	2	.000	.996
Group	90.559	2	.000	.922

The results in Table 6 (F (7, 132) = 90.55, p=<.001, η2=.922 indicate that the grouping variable can predict 92.2 % of differences between mean scores, showing significant differences between mean scores on three perceived metacognitive RSs.

In addition, between-subjects effects tests were conducted to examine the mean score change among the different groups. The results are depicted in Table 7.

Table 7

MANOVA, Tests of Tests of Between-Subjects Effects

Source	**Strategies**	F	df	Sig.	Partial Eta Squared (ηp^2)
Group	GLOB	8.009	2	.310	.224
	SUP	1.324	2	.000	.076
	PROB	1.541	2	.000	.071

The between-subjects effects tests reveal no statistically significant difference in GLOB between the groups (p>.05, ηp^2=.224). However, regarding the variables of SUP and PROB, there exists a statistically significant difference between the groups (p<.001, ηp^2=.076 and .071), respectively. Therefore, based on the findings presented in Table 7, the null hypothesis was rejected.

Journal of Applied Linguistics Studies, Vol.3, No.2, 2024: 181-196
https://jals.aliabad.iau.ir
ISSN: 2820-9974

The findings obtained from the think-aloud protocol can be summarized based on the aspects of MRs, awareness of which was measured quantitatively. As highlighted in the method section, the researchers devised a think-aloud protocol for the focus group, including 40 learners, to examine the extent to which learners actually use the strategies they perceive to be aware.

The means obtained from the questionnaire, showing the learners' perceived awareness, and the think-aloud protocol analysis, showing their actual use of the strategies, are compared to have a better view of the perceived and actual use of different types of MRs (Table 8).

Table 8

Descriptive Statistics, Perceived and Actual Use of MRs

	Perceived Use		**Actual Use**	
	M	**SD**	**M**	**SD**
GLOB	2.583	1.272	2.056	.785
PROB	2.416	1.223	3.112	.852.
SUP	2.560	1.337	1.313	.584

Table 8 shows that the actual and perceived uses of MRs differ to some extent. For example, the actual use of GLOB (M=2.05) and perceived use (M=2.58) are within the same level. The actual use of the PROB use (M=3.11) is higher than the perceived use (M=2.41). In sharp contrast, the actual use of the SUP use (M = 1.31) was lower than its perceived use (M=2.56).

A chi-square test compared the two sets of data (Table 9).

Table 9

Chi-Square Test, Actual and Perceived MRs Use

	X^2	df	p
Actual and Perceived Strategy MRs	19.05	2	.00

Considering Table 9, the researchers concluded that the learners' actual and perceived use of MSs measured within global, problem-solving, and support strategy use are significantly different. Accordingly, they argue that the learners' use PROB is more than what they perceive, whereas the SSs are less frequently used compared with what they perceive.

DISCUSSION

The current research attempted to examine the perceived and actual use of reading strategies of Iranian EFL learners at the intermediate level of English proficiency when they read in English and Persian. Regarding comparing perceived reading strategies between the two languages, a significant difference was observed in the perception of SUP and PROB strategies. There was no significant difference between the GLOB strategies, indicating that Iranian EFL learners can transfer the knowledge of GLOB strategies from L1 to the L2 reading. The similar overall usage pattern of some GLOB metacognitive strategies for Chinese college students in their L1 and L2 reading in the study conducted by Xin et al. (2017) might be an indicator that higher-level, top-down strategies like some GLOB strategies are not language-specific and readily shared in both L1 and L2 reading.

Another similarity concerning the L1 and L2 metacognitive strategies perceived by Iranian EFL learners is represented in one particular metacognitive strategy, namely the strategy of "previewing." The similar pattern in the perception of this particular strategy in both L1 and L2 academic reading might provide proof to Goodman's

(1967) psycholinguistic guessing game model of reading, which believes that reading is rather a selective process that is composed of readers' prediction of reading passages, sampling reading passages and confirming predictions based on background knowledge and prior predictions on reading passages. Shih and Huang (2020) and Aryanjam et al. (2021) also confirm that the global strategy of "having purpose of reading" has a considerable role in reading success and comprehension level in any language.

However, regarding the PROB, the difference between learners` perception of utilizing contextual clues, paying attention to text features, and evaluating the text was significant. Regarding the SUP, the difference between underlying, finding relation among text ideas, and going back and forth in the text was significantly different. Generally, the results indicated that learners failed to transfer some PROB and SUP strategies from L1 to L2. Similarly, Lin and Yu (2015) reported such a discrepancy in perceived strategies in the L1 (Chinese) and L2 (English) texts of Chinese learners. Therefore, these strategies seem to require more attention in the context of EFL reading.

The findings from analyzing the qualitative data revealed that the participants had confidence in their knowledge of various strategies. However, the implementation of their practices diverged from their initial view. Regarding the difference between perceived and real strategies, the study revealed some variations in the reported and the use of the reading strategies when actually reading. The results from the quantitative data showed a preference for using GLOB, PROB, and SUP, respectively, and this is also supported when the participants actually read academic passages. However, learners used fewer strategies in real contexts than those they reported in the questionnaire. The researcher concludes that while learners are aware of the strategies, they cannot use them effectively in practice. Along the same line, Alsheikh and Mokhtari (2011) also found that Arabic learners` real reading strategies were much less than their perceived reading strategies. In the same line, Do and Phan (2021) found a similar pattern among Vietnamese EFL learners. Some other studies also reported this discrepancy between the perceived and the actual use supports (Nilforoushan et al.,2023; Phifer & Glover,1982; Rabadi et al.,2020; Rahman, 2020), which found that students did not consistently apply the reading strategies they professed to use. This discrepancy between real and perceived metacognitive strategy use can be explained by reading task difficulty as Zhang et al. (2021) explain how EFL learners` actual use of strategies is affected by the task difficulty that learners challenged in the real process of reading.

Also, as mentioned by Mortavizadeh et al. (2022), the lack of ability to use MRs in the real context can be attributed to the Iranian socio-cultural context in which classes are teacher-centered, and students only follow teachers' instructions. This teacher-centered approach to reading contrasts with current models of reading, which emphasize constructively responsive and thoughtful reading. Constructively responsive and thoughtful reading necessitates transferring responsibility for monitoring learning from teachers to students themselves.

In sum, this study, which revealed that learners could not use their perceived reading strategies in the real reading context, reflects that MRs have been neglected in teaching EFL in Iran. With the presence of traditional mainstream teaching or instructional methods in teaching English reading comprehension in the educational system of Iran, the findings were not unexpected.

CONCLUSION AND IMPLICATIONS

As the results indicated, Iranian EFL learners' MRSs might not reveal their actual use of RSs when they read texts. On the other hand, MRSs enable language learners to control their reading by planning, coordinating, and assessing their learning process, as stated by Cohen et al. (2017). To facilitate successful reading, language learners need to know how to use reading strategies correctly, not only which strategies to employ (Rabani et al., 2020).

In conclusion, there is a need for enhanced utilization of MRs. Consistent and independent application of strategies systematically can somewhat ensure improved reading performance. Nevertheless, this necessitates implementing educational programs that explicitly teach MRs to students. Enhancing metacognitive awareness requires adjustments in teaching methods and reading comprehension curricula. Iranian EFL learners must acquire explicit metacognitive knowledge of these strategies (Mortazavizadeh et al., 2022). According to Graesser (2007), when reading strategies are repeatedly used, they become automatic cognitive processes. Having a clear understanding of metacognitive strategies can encourage implementing and practicing these strategies. These statements suggest that teacher intervention is necessary for strategies to become habitual. Specifically, effective

instruction in comprehension strategies requires teachers to be trained in teaching reading strategies, which includes demonstrating, supporting, providing ample practice, and eventually allowing students to use the strategies independently (Grabe, 2009).

In addition, EFL/ESL teachers should impart specific RSs in the classroom based on the overall perceived and real MRs in the learners' L1 and target language. The study suggests that improving students' reading skills is essential by identifying their reading strategies and examining their awareness levels. Investigating awareness of the strategies can contribute to a better understanding of the most frequently used reading English texts, a necessary issue because, in some cases, students are unaware of MRSs, which may also result in ineffective use. By building their awareness, teachers can direct the students to use the reading strategy better and help them achieve better reading comprehension.

Moreover, material developers need to consider that the focus of reading lessons should be on reading comprehension, strategy instruction, and content learning. They must recognize that strategies are one component of effective comprehension and integrate strategy instruction into reading curricula.

The current study encountered some limitations during its implementation. First, participants' personality traits were not considered when randomly assigning them to the study groups. Secondly, the English and Persian Perceived Reading Strategy Questionnaire and think-aloud rely on individuals' self-reports and might impose some inaccuracy on the data collection procedure. Additionally, reading ability and strategy might be related to readers' socioeconomic status, which was not controlled in the current study and was a limitation.

The ways teachers should teach metacognitive strategies and the processes learners should go through to learn such strategies could be the subject of further studies. Another issue in future studies can be performed in the framework of reflective learning. Case and qualitative studies can help future researchers ponder students' reflections on adopting metacognitive strategies while reading. Additionally, the role of technology in metacognitive strategy use can be the focus of future researchers. A comparison between explicit and implicit metacognitive strategy teaching in online and face-to-face classes and using marginal annotations and computerized glosses in online platforms can be several domains for future investigation.

Finally, the study of metacognitive reading strategies still needs scrutiny within SLA models. Thus, more theoretical studies are necessary to develop teaching and learning second language reading in English. Since readers' characteristics, such as personality factors, personal preferences, and socioeconomic status, might affect the type of reading strategies, further studies should consider such variables.

REFERENCES

Abedi, D. (2017). The relationship between depth of vocabulary knowledge and reading comprehension of Iranian EFL learners. *Journal of Applied Linguistics and Language Research*, *4*(4), 224-229.

Abubakar, M. (2020). The interplay of anxiety, learning strategies and students' reading comprehension. *ETERNAL (English, Teaching, Learning, and Research Journal)*, *6*(1), 52-64. https://doi.org/10.24252/Eternal.V61.2020.A5

Ahmadian, M., & Pasand, G. P. (2017). EFL learners' use of online metacognitive reading strategies and its relation to their self-efficacy in reading. *Reading Matrix, 17*(2), 117–132.

Al Asmari, A., & Javid, C. Z. (2018). Role of content schema in reading comprehension among Saudi EFL students: EFL teachers' perspective and use of appropriate classroom strategies. *International Journal of English Linguistics*, *8*(4), 96-105. https://doi.org/10.5539/ijel.v8n4p96

Alkhaleefah, T. A. (2023). Assessing Saudi EFL Learners' Metacognitive Awareness of Reading Strategies: A Cross-Sectional Study. *Theory and Practice in Language Studies*, *13*(11), 2780-2788. https://doi.org/10.17507/tpls.1311.07

Allan, D. (2004). *Oxford placement test.* Oxford: Oxford University Press.

Al-Mekhlafi, A. M. (2018). EFL Learners' Metacognitive Awareness of RSs. *International Journal of Instruction*, *11*(2), 297-308.

Al-Nujaidi, A. H. (2003). The relationship between vocabulary size, reading strategies, and reading comprehension of EFL learners in Saudi Arabia [Doctoral dissertation]. Oklahoma State University.

Al-Qahtani, A. A. (2020). Investigating metacognitive think-aloud strategy in improving Saudi EFL learners' reading comprehension and attitudes. *English Language Teaching, 13*(9), 50–62. https://doi.org/10.5539/elt.v13n9p50

Al Rasheed, H. S. S. (2014). Examining the effectiveness of pre-reading strategies on Saudi EFL college students' reading comprehension. English Language Teaching, 7(11), 79–91. https://doi.org/10.5539/elt.v7n11p79

Alsheikh, N., & Mokhtari, K. (2011). An examination of the metacognitive RSs used by native speakers of Arabic when reading in English and Arabic. *English Language Teaching, 4* (2), 151-160. https://doi.org/10.5539/elt.v4n2p151

Aryanjam, L., Rashtchi, M., & Maftoon, P. (2021). Boosting reading achievement by employing learner autonomy curriculum: Effects of strategy instruction. *Iranian Journal of English for Academic Purposes, 10* (3), 51-70. https://dorl.net/dor/20.1001.1.24763187.2021.10.3.4.2

Bemani Naeini, M., & Rezaei, R. (2015). Examining and dealing with the issue of reading strategy use by Iranian EFL learners. *The Reading Matrix: An International Online Journal*, *15*(2). 182-195.

Busby, B. D. (2018). *Transfer of graphing skills from math to chemistry* [Doctoral dissertation, University of Montana].

Cohen, L., Manion, L., & Morrison, K. (2017). *Research methods in education*. Routledge.

Cummins, J. (1979). Linguistic interdependence and the educational development of bilingual children. *Review of Educational Research*, *49*(2), 222-251. https://doi.org/10.3102/00346543049002222

Do, H. M., & Phan, H. L. T . (2021). Metacognitive Awareness of Reading Strategies on Second Language Vietnamese Undergraduates. *Arab World English Journal, 12* (1) 90-112. https://dx.doi.org/10.24093/awej/vol12no1.7

Feller, D. P., Kopatich, R. D., Lech, I., & Higgs, K. (2020). Exploring reading strategy use in native and L2 readers. *Discourse Processes*, *57*(7), 590-608. https://doi.org/10.1080/0163853X.2020.1735282

Goodman, K. S. (1967). Reading: A psycholinguistic guessing game. *Literacy Research and Instruction, 6*(4), 126-135.

Grabe, W. (2009). *Reading in a second language.* Cambridge University Press.

Guo, L. (2018). Modeling the relationship of metacognitive knowledge, L1 reading ability, L2 language proficiency and L2 reading. *Reading in a Foreign Language*, *30*(2), 209-231.

Hong-Nam, K., & Page, L. (2014). Investigating metacognitive awareness and reading strategy use of EFL Korean university students. *Reading Psychology, 35*(3), 195-220. https://doi.org/10.1080/02702711.2012.675418

Jamalipour, S., & Farahani, A. A. K. (2015). The effect of vocabulary knowledge and background knowledge on Iranian EFL learners' L2 reading comprehension. *Journal of Applied Linguistics and Language Research*, *2*(2), 107-121.

Kintsch, W. (1988). The role of knowledge in discourse comprehension: A construction-integration model. *Psychological Review, 95*(2), 163-182. https://doi.org/10.1037/0033-295X.95.2.163

Kong, A. (2006). Connections between L1 and L2 readings: RSs used by four Chinese adult readers. *The Reading Matrix*, *6*(2), 19-45.

Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology*, *28*(4), 563-575. https://doi.org/10.1111/j.1744-6570.1975.tb01393.x

Lin, L., & Yu, W. (2015). A think-aloud study of strategy use by EFL college readers reading Chinese and English texts. *Journal of Research in Reading, 38*(3), 286-306. https://doi.org/10.1111/1467-9817.12012

Loppies, H. J., & Lekatompessy, J. (2021). Developing L2 learners MSs through reading group activities. *Journal of Applied Linguistics, Literature and Culture*, *1*(1), 33-40. https://doi.org/10.30598/huele.v1.i1.p33-40

Malcolm, D. (2009). Reading strategy awareness of Arabic–speaking medical students studying in English. *System, 37*, 640-651. http://doi.org/10.1016/j.system.2009.09.008

Mokhtari, K., & Reichard, C. A. (2002). Assessing students' metacognitive awareness of RSs. *Journal of Educational Psychology*, *94*(2), 249. https://doi.org/10.1037//0022-0663.94.2.249

Mokhtari, K., & Sheorey, R. (2002). Measuring ESL students' awareness of RSs. *Journal of Developmental Education, 25*(3), 2-11.

Mortazavizadeh, G., Golshan, M., & Rezai, M. J. (2022). Metacognitive Strategies Awareness and Use and Reading Comprehension of Iranian EFL University Students: A Structural Equation Modeling Approach. *Iranian Evolutionary Educational Psychology Journal*, *4*(3), 516-535.

Mytkowicz, P., Goss, D., & Steinberg, B. (2014). Assessing metacognition as a learning outcome in a postsecondary strategic learning course. *Journal of Postsecondary Education and Disability*, *27*(1), 51-62.

Nilforoushan, S., Rashtchi, M., & Abbasian, G.-R. (2023). Exploring the Perceived and Real Metacognitive Reading Strategies of Iranian EFL Learners: Different Text Types in Focus. Sage Open, 13(1). https://doi.org/10.1177/21582440231164567

Pallant, J. (2020). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. London: McGraw-Hill.

Perfetti, C., & Stafura, J. (2014). Word knowledge in a theory of reading comprehension. *Scientific Studies of Reading*, *18*(1), 22-37. https://doi.org/10.1080/10888438.2013.827687

Rabadi, R. I., Al-Muhaissen, B., & Al-Bataineh, M. (2020). Metacognitive reading strategies use by English and French foreign language learners. *Jordan Journal of Modern Languages and Literatures*, *12*(2), 243-262.

Rahman, K. (2020). Perceived use of metacognitive strategies by EFL undergraduates in academic reading. *VELES*, *4*(1), 44-52. https://doi.org/10.29408/veles%20journal.v4i1.1975

Rouet, J. F., Brith, M. A., Durik, A. M. (2017). RESOLV: Readers` representation of reading contexts and tasks. *Educational Psychology*, *52*(3), 200-215. https://doi.org/10.1080/00461520.2017.1329015

Shahnazari, M. T., & Dabaghi, A. (2014). A critical overview of models of reading comprehension with a focus on cognitive aspects. *Research in English Language Pedagogy*, *2*(1), 7-19.

Sheikh, I., Soomro, K. A., & Hussain, N. (2019). Metacognitive awareness of RSs, reading practices and academic attainments of university students. *Journal of Education and Educational Development*, *6*(1), 126-137.

Sheorey, R., & Mokhtari, K. (2001). Differences in the metacognitive awareness of RSs among native and non-native readers. *System*, *29*(4), 431-449. https://doi.org/10.1016/S0346-251X(01)00039-2

Shih, H. C. J., & Huang, S. H. C. (2020). College students' metacognitive strategy use in an EFL flipped classroom. *Computer Assisted Language Learning*, *33*(7), 755-784. https://doi.org/10.1080/09588221.2019.1590420

Sidek, H. M., & Rahim, H. A. (2015). The role of vocabulary knowledge in reading comprehension: A cross-linguistic study. *Procedia-Social and Behavioral Sciences*, *197*, 50-56. https://doi.org/10.1016/j.sbspro.2015.07.046

Sparks, R., Patton, J., Ganschow, L., & Humbach, N. (2009). Long-term crosslinguistic transfer of skills from L1 to L2. *Language Learning*, *59*(1), 203-243. https://doi.org/10.1111/j.1467-9922.2009.00504.x

Taghizadeh, M., & Khalili, M. (2019). Engineering students' academic reading comprehension: The contribution of attitude, breadth and depth of vocabulary knowledge. *Iranian Journal of English for Academic Purposes*, *8*(1), 49-66. https://doi.org/20.1001.1.24763187.2019.8.1.4.4

Talebi, S. H. (2014). Cross-linguistic transfer among Iranian learners of English as a foreign language. *Issues in Educational Research*, *24*(2), 212-227.

Tang, M., & Tian, J. (2015). Associations between Chinese EFL graduate students' beliefs and language learning strategies. *International Journal of Bilingual Education and Bilingualism*, *18*(2), 131-152. https://doi.org/10.1080/13670050.2014.882882

Van Gelderen, A., Schoonen, R., De Glopper, K., Hulstijn, J., Simis, A., Snellings, P., & Stevenson, M. (2004). Linguistic knowledge, processing speed, and metacognitive knowledge in first-and second-language reading comprehension: A componential analysis. *Journal of Educational Psychology*, *96*(1), 19-30. https://doi.org/10.1037/0022-0663.96.1.19

Walter, C. (2004). Transfer of reading comprehension skills to L2 is linked to mental representations of text and to L2 working memory. *Applied Linguistics*, *25*(3), 315-339. https://doi.org/10.1093/applin/25.3.315

Walter, C. (2007). First-to second-language reading comprehension: Not transfer, but access. *International Journal of Applied Linguistics*, *17*(1), 14-37. https://doi.org/10.1111/j.1473-4192.2007.00131.x

Wegmann, B., & Knezevic, M. (2002). *Mosaic 1 Reading*. McGraw-Hill.

Xiao, W. (2016). Schema theory, construction-integration reading model and reading pedagogy. In *2016 International Conference on Advances in Management, Arts and Humanities Science* (pp. 185-189). Atlantis Press.

Xin, Y., Ismail, F. B., & Abd Aziz, A. B. (2018). Influence of L1 metacognitive reading strategies on L2 academic reading of Chinese college students. *Social Sciences*, *9*(5).

Zhang, L., & Seepho, S. (2013). Metacognitive strategy use and academic reading achievement: Insights from a Chinese context. *Electronic Journal of Foreign Language Teaching*, *10*(1), 54-69.

Zhang, W., Zhang, D., & Zhang, L. J. (2021). Metacognitive instruction for sustainable learning: Learners' perceptions of task difficulty and use of MSs in completing integrated speaking tasks. *Sustainability*, *13*(11), 62-75. https://doi.org/10.3390/su13116275